



## In the United States Patent and Trademark Office

Appellants: Ganesh C. Deka et al. Docket No.: 14075  
Serial No.: 09/727,857 Group: 1771  
Confirmation No: 4263 Examiner: C. Pratt  
Filed: December 1, 2000  
For: Fibrous Layer Providing Improved Porosity Control for Nonwoven Webs

RECEIVED  
SEP 12 2003  
TC 1700

### Brief on Appeal to the Board of Patent Appeals and Interferences

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir

Pursuant to 37 C.F.R. 1.192 Appellants respectfully submit this Brief in support of their Appeal of Examiner Pratt's **Final Rejection** of claims which was mailed on March 12, 2003.

On July 11, 2003, Appellants, pursuant to 37 C.F.R. 1.191 mailed a timely Notice of Appeal accompanied by a one month extension of time request. Thus, the time period for filing this Brief ends on September 11, 2003.

In accordance with 37 C.F.R. 1.192(a) this Appeal Brief is filed in triplicate.

---

#### Real Party In Interest

The present Application has been assigned to Kimberly-Clark Worldwide, Inc.

---

#### Related Appeals and Interferences

There are no other appeals or interferences known to Appellants, their legal representatives or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision on this appeal.

---

#### Status of the Claims

Claims 1-15 remain in the application with claims 1-15 being finally rejected.

---

#### Status of Amendments Filed Subsequent to Final Rejection

Appellants' amendment filed April 14, 2003, correcting an inadvertent error in the specification was considered by the Examiner who indicated in an Advisory Action mailed May 2, 2003, that it would be entered on filing of an appeal.

Appellants' supplemental amendment filed May 19, 2003, was not entered, and the Examiner indicated in an Advisory Action mailed June 6, 2003, that it would not be entered on filing of an appeal.

---

### **Summary of the Invention**

The invention is directed to a fibrous layer particularly adapted for use as a component of personal care products such as sanitary napkins. The layer is constituted and constructed to provide controlled porosity and fluid movement properties desirable for such applications. A key component is a deposition of microfine fibers from a slurry that are then dried. The slurry is applied to a wettable or hydrophilic treated nonwoven substrate in an amount to achieve the desired porosity and wicking properties.

---

### **The Issues Presented**

Are claims 1, 3, 5-11 and 14 anticipated in the sense of 35USC102(e) by USP 6,395,957 to Chen et al. ("Chen").

Are claims 2, 4, 12, 13 and 15 obvious in the sense of 35USC103(a) in view of Chen.

---

### **Grouping of the Claims**

Claims 1, 3, 5-11 and 14 stand or fall together with the anticipation rejection.

Claims 2, 4, 12, 13 and 15 stand or fall together with the obviousness rejection.

---

### **Argument**

#### Rejection of Claims 1, 3, 5-11 and 14

It is respectfully submitted that the Examiner's Final Rejection is based on a clearly erroneous construction of Appellants' claims and must be reversed.

As stated above, Appellants' claims are directed to a hydrophilic or wettable nonwoven web containing a slurry deposition of microfine fibers (Claim 1). Claims 3, 5-11 and 14 also contain these limitations. In contrast, Chen is directed to a three-dimensional basesheet onto the elevated portions of which is printed or deposited a hydrophobic material which can be fibrous in nature. When used as a liner, the Chen material presents a dry feel while promoting liquid transfer. As acknowledged by the Examiner, the finest fibers identified in Chen are 1 denier which, for polypropylene, calculates to about 12.5 microns. The Chen basesheet can be wetlaid but the hydrophobic material is preferably viscous and applied by brushing, spraying or the like, although it can be dispersed, emulsified and applied as a coating which can include solid forms like particles and fibers. Examples are waxes, PTFE, polyurethane emulsions, fats, polyolefins, and the like. There is clearly no teaching and, it is respectfully submitted, no suggestion of applying a slurry deposition of microfine fibers in the sense of Appellants' claims.

To support the rejection the Examiner has adopted the position that Appellants' microfine fibers read on fibers having diameters of 0.5 micron and above and, therefore, are met by the broad Chen disclosure of coatings including solid forms like hydrophobic particles or fibers, generally. This construction ignores Appellants'

definition and clear meaning set forth in the specification. For example, page 5, beginning in line 2, Appellants state: "The micro-fine fibers can have a diameter from a positive amount to 0.5 microns." To contort the meaning to describe all diameters above 0.5 micron down to 0.5 micron is to ignore the basic teachings of the specification regarding the extremely fine nature of the fibers. Any alleged ambiguity in this regard is removed by reference to page 6, beginning at line 21: "The fibrous material is one having fibers with very small average diameters (micro-fine fibers); on the order of tenths of a micron, preferably from a positive amount to 0.5 microns, and great lengths." (Emphasis supplied.) Furthermore, the examples illustrate such diameter fibers as microbial or bacterial cellulose. The Examiner's position, Appellants respectfully submit, is clearly unsound.

Alternatively, the Examiner has taken the position that the reference in Chen to hydrophobic fibers less than about 9 denier, less than about 6 denier and preferably 1-5 denier anticipates the slurry deposition of micro-fine fibers of Appellants' claims. As mentioned above, even the lowest limit of these ranges is in the range of 12.5 microns for polypropylene, greater by far than Appellants' micro-fine fibers. This argument, likewise, falls of its own weight as an anticipation of Appellants' claim 1 and claims 3, 5-11 and 14 dependent thereon.

Citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) MPEP 2131 provides "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. An anticipating reference must describe the [patented] subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention. [Citations omitted.] *Crown Operations International, Ltd. v. Solutia Inc.* CAFC 289 F.3d 1367 (2002). Anticipation by inherent disclosure is appropriate only when the reference discloses prior art that must *necessarily* include the unstated limitations. [Citation omitted.] [Emphasis in original.] *Transclean Corporation v. Bridgewood Services, Inc.* 2002 WL 1012878, -- F.3d -- (2002). Appellants respectfully submit that these principles require reversal of the Examiner's rejection.

#### Rejection of Claims 2, 4, 12, 13 and 15

For the reasons stated above, Chen fails to teach Appellants' claimed structure of a wettable or hydrophilic nonwoven with slurry deposited micro-fine fibers. It is also respectfully submitted that this structure would not have been obvious, in the sense of 35USC103(a) in view of the Chen teachings relating to a three dimensionally structured basesheet with a network of hydrophobic fibers having openings aligned with depressions in the three dimensional structure. Those of skill would not be led to the micro-fine fibers used in the present invention to form the network of macroscopic openings or applied to the elevated regions described in Chen. Specifically with respect to Claims 2 and 4, micro-fine fibers of up to 0.5 micron diameter are not suggested by Chen and therefore the range is not suggested. Claims 12, 13 and 15 are unobvious, in the sense of 35USC103(a) for all the reasons of the claims from which they depend. This rejection is believed to be in error and should be reversed.

---

## Conclusion

For the reasons stated above it is Appellants' position that the Examiner's rejection of claims 1-15 has been shown to be untenable and should be **reversed** by the Board.

---

Please charge the \$320.00 fee, pursuant to 37 C.F.R. 1.17(c), for filing this Appeal Brief to Kimberly-Clark Worldwide, Inc. deposit account number 11-0875. Any additional prosecutorial fees which are due may also be charged to deposit account number 11-0875.

The undersigned may be reached at (770) 587-8096.

Respectfully submitted,

Ganesh C. Deka et al.

By:




William D. Herrick

Registration No.:25,468

## CERTIFICATE OF MAILING

I, William D. Herrick, hereby certify that on 5-Sept-03 this document is being deposited with the United States Postal Service as first-class mail, postage prepaid, in an envelope addressed to: Mail Stop Appeal Brief – Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

By:



William D. Herrick

---

## Appendix – The Claims On Appeal

The claims on appeal are:

- 1) A fibrous layer for personal care products comprising micro-fine fibers deposited as an aqueous slurry onto a nonwoven web that is inherently wettable or treated to be hydrophilic, and subsequently dried.
  - 2) The fibrous layer for personal care products of claim 1 wherein said micro-fine fibers have an average diameter under 0.5 microns.
  - 3) The fibrous layer of claim 1 wherein said nonwoven web is produced from a method selected from the group consisting of meltblowing, spunbonding, coforming, bonding and carding, and airlaying.
  - 4) The fibrous layer of claim 2 wherein said nonwoven web has between 0.1 and 5 weight percent micro-fine fibers.
  - 5) The fibrous layer of claim 1 wherein said nonwoven web comprises inherently wettable fibers.
  - 6) The fibrous layer of claim 1 wherein said nonwoven web comprises hydrophilically modified polymers.
  - 7) A diaper comprising the fibrous layer of claim 1.
  - 8) A training pant comprising the fibrous layer of claim 1.
  - 9) An incontinence product comprising the fibrous layer of claim 1.
  - 10) A bandage comprising the fibrous layer of claim 1.
  - 11) A sanitary napkin comprising the fibrous layer of claim 1.
  - 12) The fibrous layer of claim 1 wherein said deposited microfine fibers have a negative charge.
  - 13) The fibrous layer of claim 4 wherein said deposited microfine fibers have a negative charge.
  - 14) The fibrous layer of claim 1 wherein said deposited microfine fibers are wettable.
  - 15) The fibrous layer of claim 4 wherein said deposited microfine fibers are wettable.
-